

Remarks

In the instant Office Action dated March 5, 2008, the following rejection is noted: claims 1-16 stand rejected under 35 U.S.C. § 103(a) over Applicant's Admitted Prior Art (Background and Figures 1 and 2) in view of Wise (U.S. Patent Pub. 2004/0025000), and in further view of Duluk, Jr. (U.S. Patent No. 6,717,576)

Applicant respectfully traverses the § 103(a) rejection of claims 1-16 because the cited combination does not correspond to the claimed invention. For example, the Office Action continues to erroneously assert that Wise's control/data tokens correspond to the claimed auxiliary elements. As was discussed in detail in the Response dated December 14, 2007 which is hereby incorporated by reference in its entirety, Wise's tokens are data that is passed between the pipeline stages (*see, e.g.*, Figure 1 and paragraphs 0380-0382), Wise's tokens are not processing stages that can be selectively coupled between a pair of stages in the pipeline. *See, e.g.*, paragraphs 0036-0039. Thus, the cited portions of Wise do not teach selectively coupling auxiliary elements (*i.e.*, processing stages) between a pair of core pipeline elements as in the claimed invention. The cited portions of the Wise reference are essentially unrelated to the claimed invention (*e.g.*, the Office Action acknowledges that the combination of Applicant's APA and Wise does not disclose coupling any auxiliary elements between a pair of core elements to process data).

Moreover, the pipeline stages in Wise allow control/data tokens to be communicated between stages; however, there is no indication that the functional blocks in Applicant's APA permit the exchange of tokens as taught by Wise or that the functional blocks in Applicant's APA contain the required logic circuitry that is expressly taught by Wise in paragraph 0378 as being necessary for the communication of the tokens. The Office Action's hypothetical combination does not include such logic circuitry, and any combination that did would be effectively replacing the functional blocks of Applicant's APA. *See, e.g.*, M.P.E.P. § 2143.01 ("If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.").

In view of the above, the § 103(a) rejection of claims 1-16 is improper and Applicant requests that it be withdrawn. Notwithstanding the above, in an effort to

facilitate prosecution, Applicant has amended claim 1 to recite that the auxiliary elements are selectively coupled responsive to external coupling-select signals. This amendment is not intended to change the scope of the claims, as the skilled artisan would have recognized that these aspects were already implicitly present. Applicant submits that none of the cited references teach selectively coupling auxiliary elements responsive to external coupling-select signals as claimed. For example, Wise's tokens are internal signals that are exchanged between the stages of the pipeline. Thus, Applicant requests that the § 103(a) rejection of claims 1-16 be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1-16 because the Office Action's conclusion that certain pipeline stages (*e.g.*, 10000 and 15000) of the Duluk reference "are not used in every processing case" is directly contradicted by Duluk. *See, e.g.*, Figure 15. As a first example, Duluk teaches that MIJ block 10000 receives packets from CUL block 9000 and processes these packets using information stored in PMEM 5000 by MEX block 4000. *See, e.g.*, Col. 61:27-55. As a second example, Duluk teaches that PIX block 15000 receives VSP packets from PHG block 14000 and mode packets from MIJ block 10000, uses the mode packets to process the VSP packets, and when PIX block 15000 has accumulated a tile's worth of finished pixels, it blends the samples within each pixel and sends them to the BKE block 16000, to be stored in the frame buffer FRM 17000. *See, e.g.*, Col. 66:27-65. Thus, Duluk teaches that each of these blocks (*e.g.*, 4000, 5000, 9000, 10000, 14000 and 15000) are used to process packets in direct contrast to the Office Action's assertion that "some elements are enabled and disabled during execution." As such, Duluk's blocks do not correspond to the claimed auxiliary elements which are configured to be selectively coupled between a pair of core pipeline elements. The cited portions of Duluk do not teach any such coupling of the above discussed blocks. Accordingly, the § 103(a) rejection of claims 1-16 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 1-16 because the Office Action fails to provide sufficient detail regarding the proposed combination to enable Applicant to determine the propriety of such a combination. Applicant notes that while the elements of the cited references are identified, little explanation of how these elements are combined is provided. In an effort to facilitate prosecution, Applicant

assumes that the asserted combination attempts to create a hypothetical embodiment as described below. To that end, the following discussion is provided. Should Applicant's interpretation be incorrect, Applicant requests that the Examiner provide clarification and afford Applicant with an opportunity to respond as required, for example, by 35 U.S.C § 132. As best as can be determined, the Office Action's combination proposes to somehow modify Wise's control/data tokens (which are data as discussed above) to somehow be processing stages that process data. The Office Action has not provided any explanation regarding how or why the skilled artisan would modify Wise's data tokens in such a manner. The cited portions of the references do not provide any further clarification. Applicant submits that it would be illogical to the skilled artisan to modify Wise's data tokens (which are themselves data that is to be communicated between stages) into processing stages that process data. Should the Examiner have envisioned some, as of yet unidentified, combination of the references, Applicant requests clarification, a showing of support and an opportunity to respond pursuant to M.P.E.P. § 706.07 ("The examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal."). *See, also* M.P.E.P. § 2141 ("the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit"). Accordingly, the § 103(a) rejection of claims 1-16 is improper and Applicant requests that it be withdrawn.

Applicant further traverses the § 103(a) rejection of claims 15-16 because there is no motivation for the skilled artisan to modify the pipelines 120 of Applicant's Figure 1 from homogenous pipelines to heterogeneous pipelines as proposed by the Office Action. Such a modification would defeat Applicant's APA stated purpose of providing maximum flexibility by providing identical pipelines that each can be used to provide any of the desired functions. *See, e.g.*, M.P.E.P. § 2143.01 discussed above. Accordingly, the § 103(a) rejection of claims 15-16 is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, John Rehberg, of NXP Corporation at (408) 474-9061 (or the undersigned).

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